FIG. 1

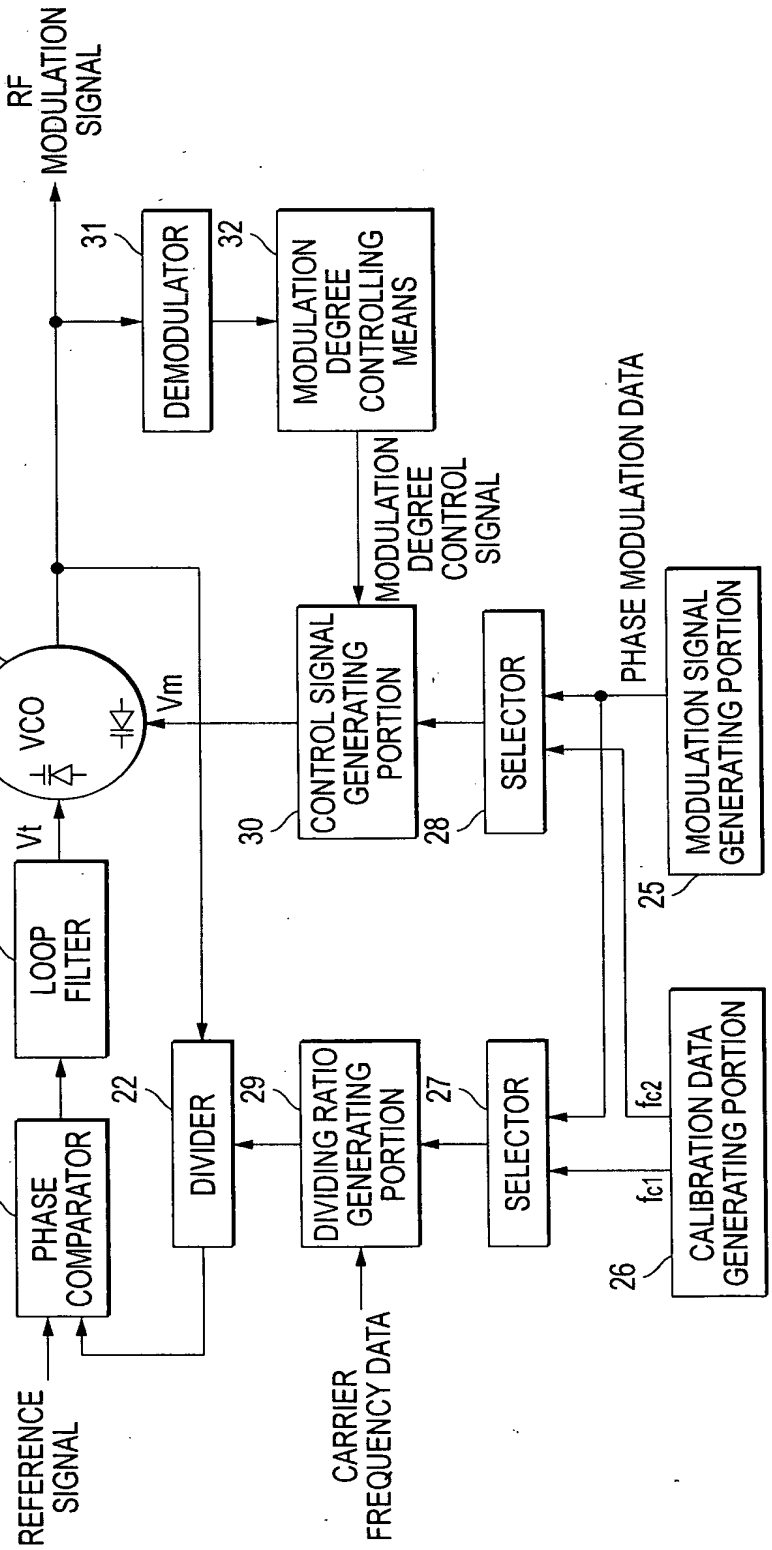
RF MODULATION SIGNAL
31
DEMODULATOR
32
MODULATION DEGREE CONTROLLING MEANS
MODULATION DEGREE CONTROL SIGNAL
PHASE MODULATION DATA
21
VCO
Vm
Vt
CONTROL SIGNAL GENERATING PORTION
30
SELECTOR
28
MODULATION SIGNAL GENERATING PORTION
25
24
LOOP FILTER
22
DIVIDER
29
DIVIDING RATIO GENERATING PORTION
27
SELECTOR
fc2
fc1
CALIBRATION DATA GENERATING PORTION
26
23
PHASE COMPARATOR
REFERENCE SIGNAL
CARRIER FREQUENCY DATA

FIG. 2

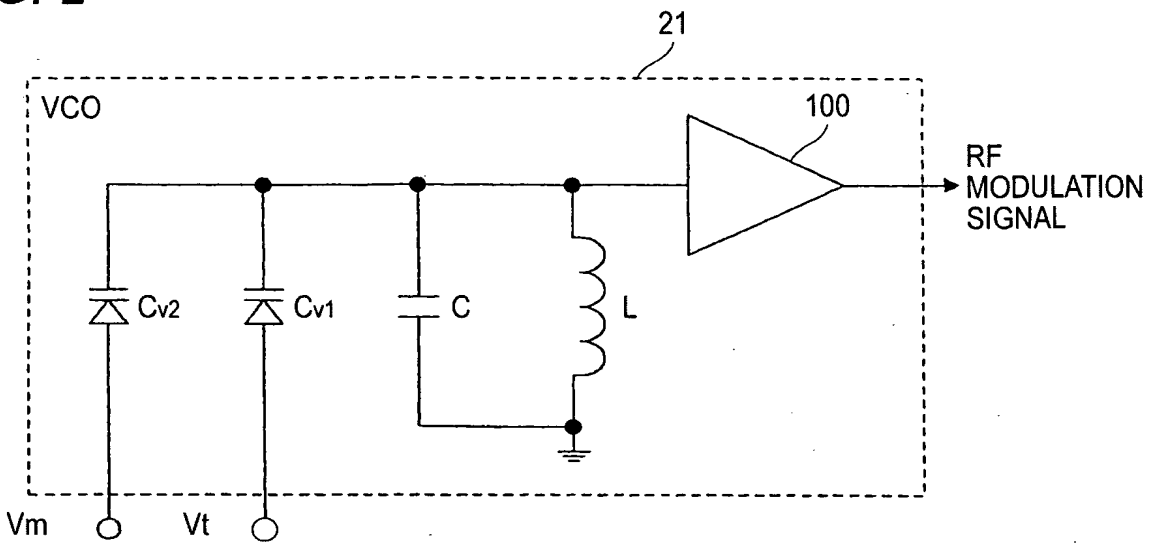

FIG. 3

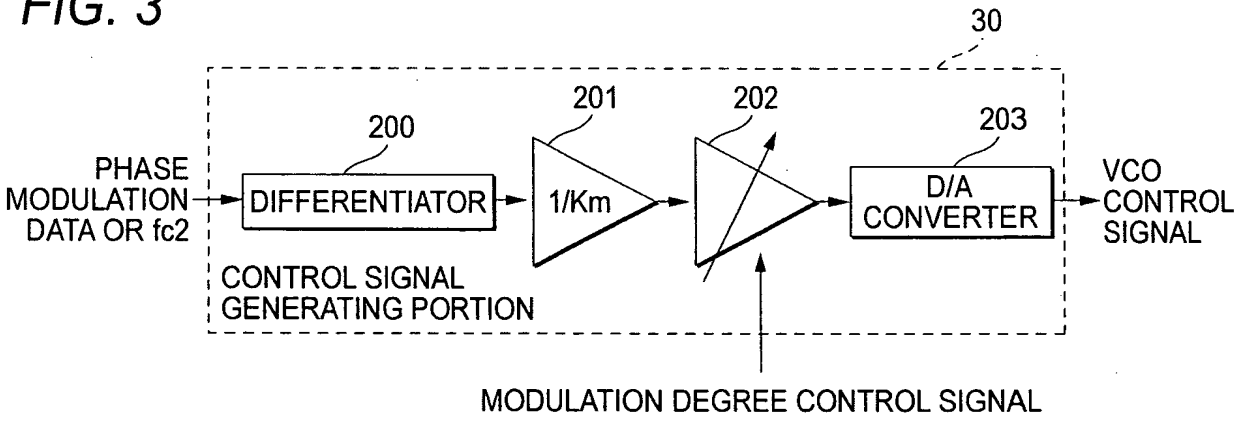

FIG. 4

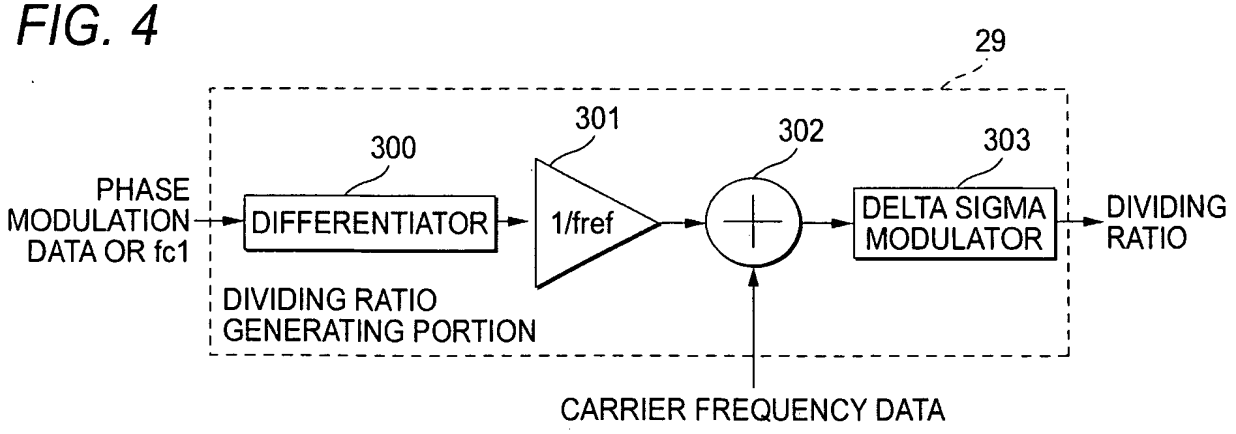

FIG. 5

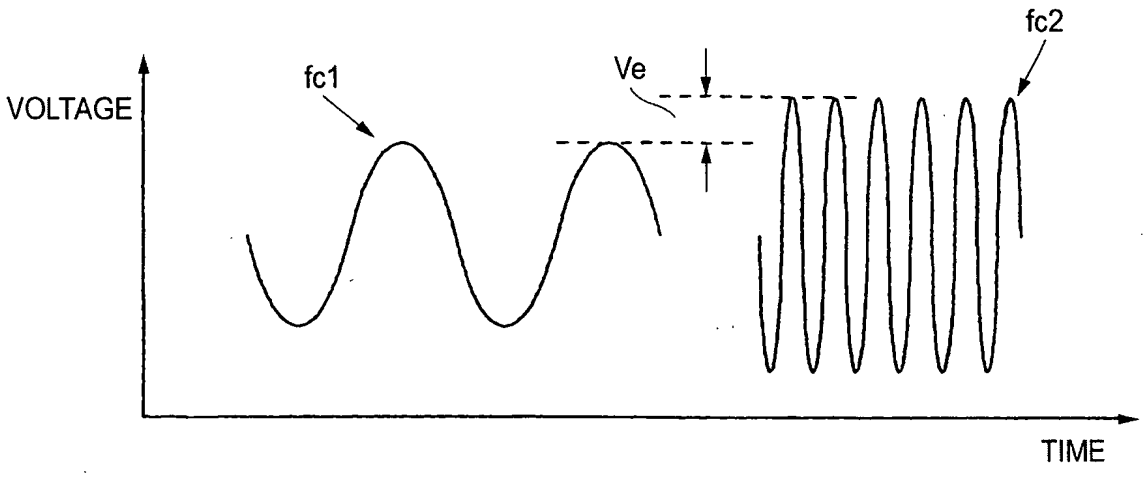

FIG. 6

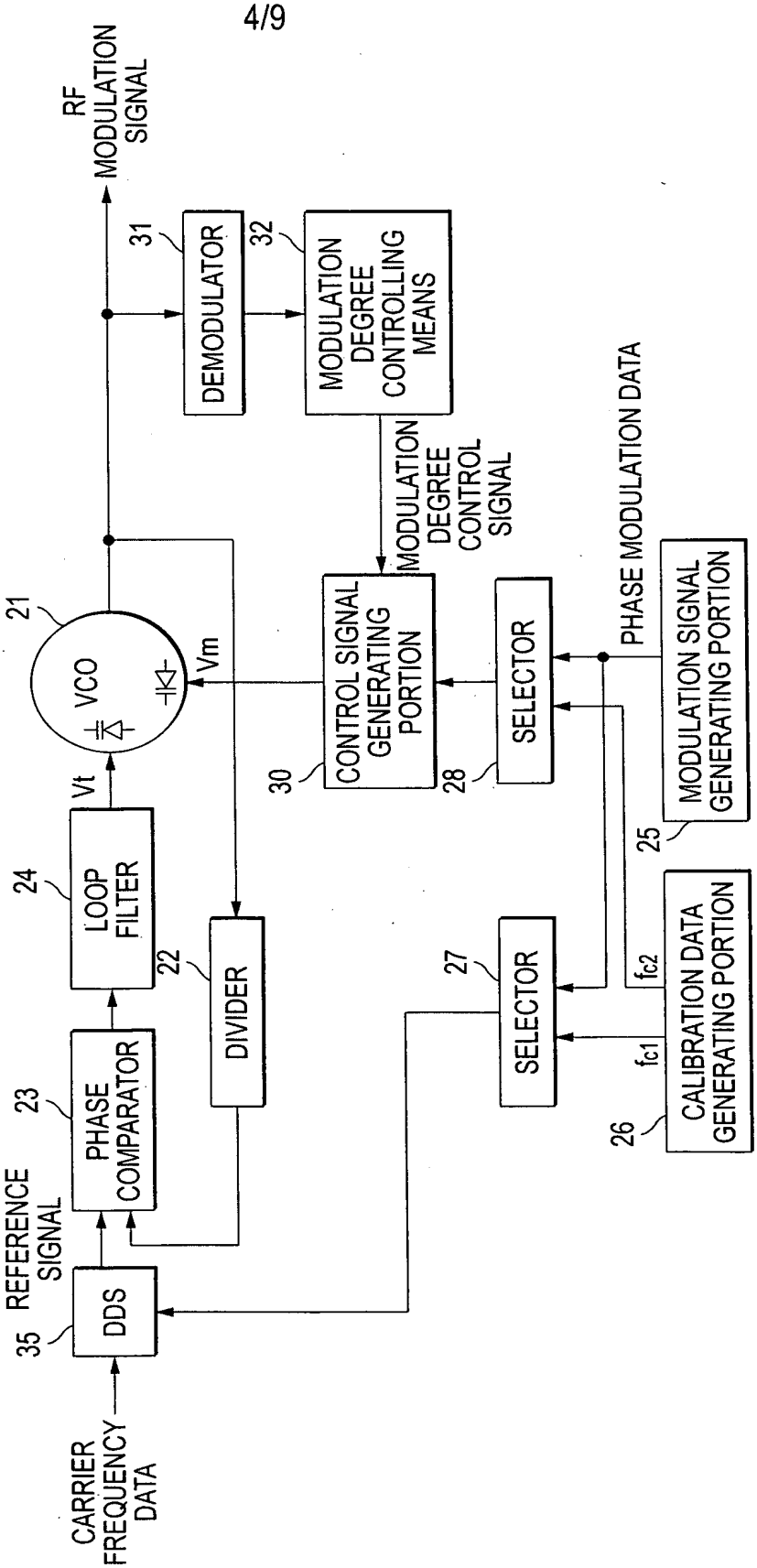
RF MODULATION SIGNAL
31
DEMODULATOR
32
MODULATION DEGREE CONTROLLING MEANS
MODULATION DEGREE CONTROL SIGNAL
21
VCO
Vm
CONTROL SIGNAL GENERATING PORTION
30
SELECTOR
28
PHASE MODULATION DATA
MODULATION SIGNAL GENERATING PORTION
25
Vt
24
LOOP FILTER
22
DIVIDER
27
SELECTOR
fc2
fc1
CALIBRATION DATA GENERATING PORTION
26
23
PHASE COMPARATOR
REFERENCE SIGNAL
35
DDS
CARRIER FREQUENCY DATA

FIG. 7

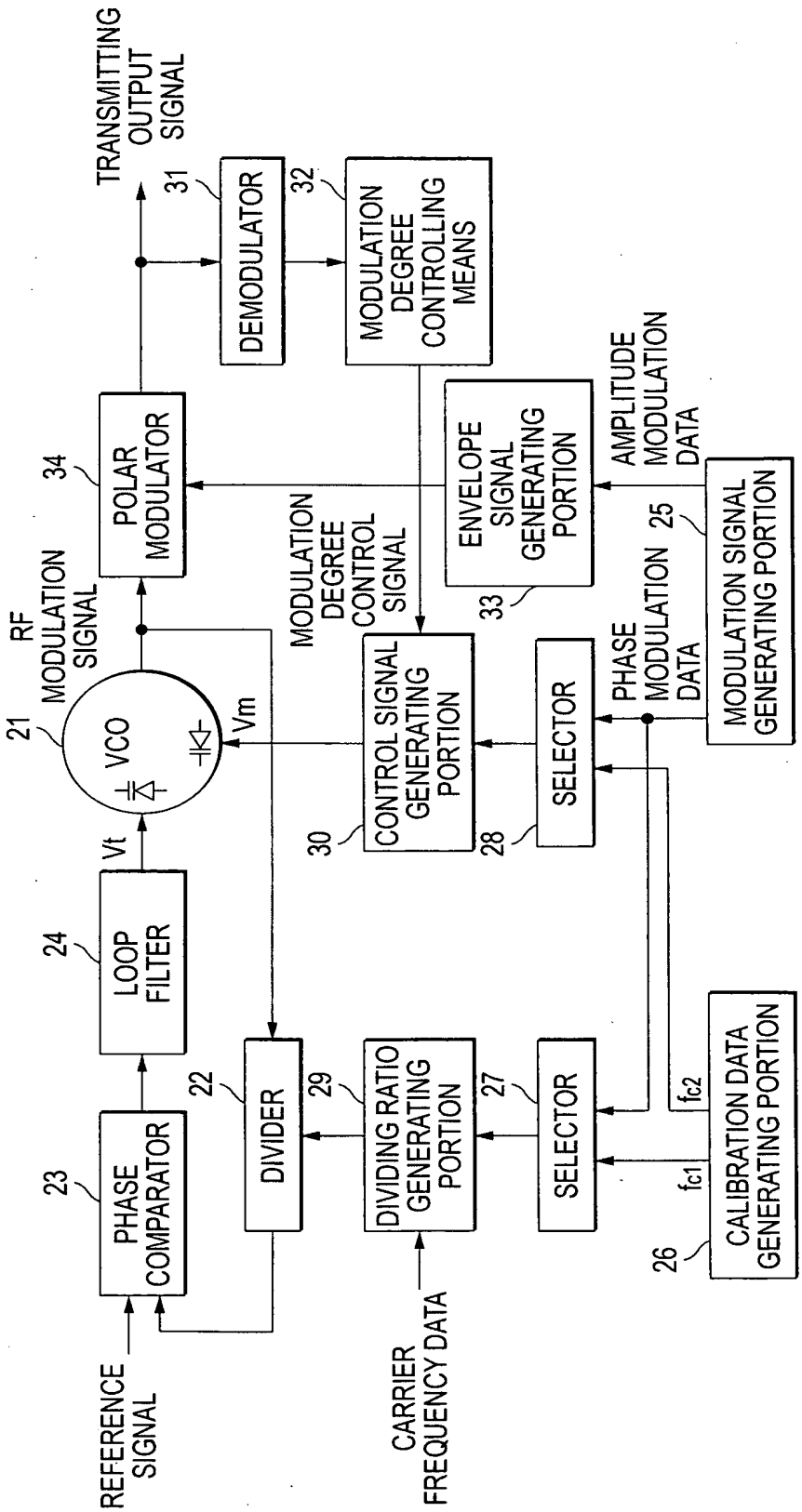
TRANSMITTING OUTPUT SIGNAL
31
DEMODULATOR
32
MODULATION DEGREE CONTROLLING MEANS
34
POLAR MODULATOR
ENVELOPE SIGNAL GENERATING PORTION
33
AMPLITUDE MODULATION DATA
25
MODULATION SIGNAL GENERATING PORTION
RF MODULATION SIGNAL
MODULATION DEGREE CONTROL SIGNAL
21
VCO
Vm
Vt
30
CONTROL SIGNAL GENERATING PORTION
28
SELECTOR
PHASE MODULATION DATA
24
LOOP FILTER
22
DIVIDER
29
DIVIDING RATIO GENERATING PORTION
27
SELECTOR
fc2
23
PHASE COMPARATOR
fc1
26
CALIBRATION DATA GENERATING PORTION
REFERENCE SIGNAL
CARRIER FREQUENCY DATA

FIG. 8

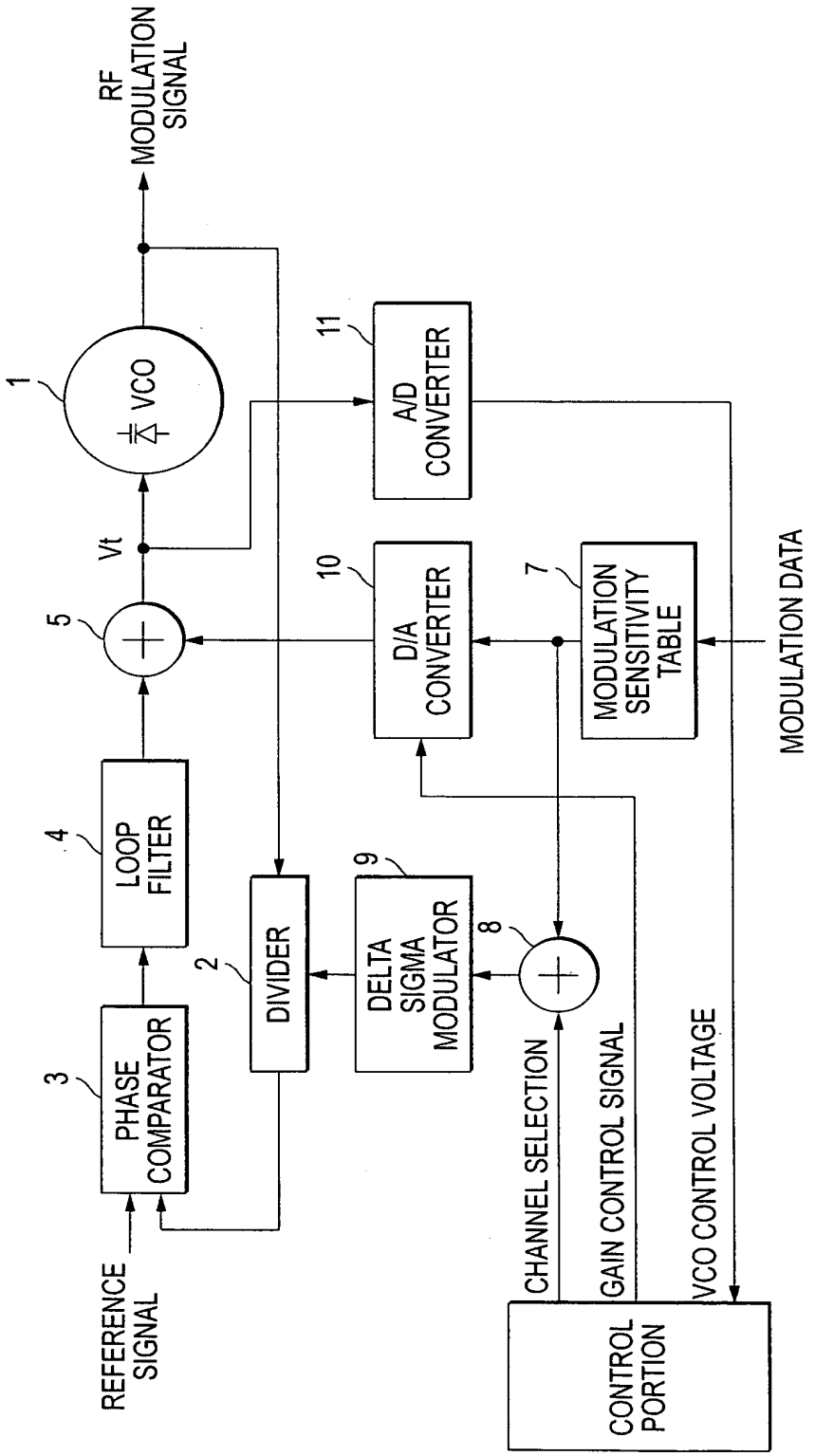
RF MODULATION SIGNAL
1
VCO
11
A/D CONVERTER
Vt
5
10
D/A CONVERTER
7
MODULATION SENSITIVITY TABLE
MODULATION DATA
4
LOOP FILTER
9
DELTA SIGMA MODULATOR
8
2
DIVIDER
3
PHASE COMPARATOR
REFERENCE SIGNAL
CHANNEL SELECTION
GAIN CONTROL SIGNAL
VCO CONTROL VOLTAGE
CONTROL PORTION

FIG. 9

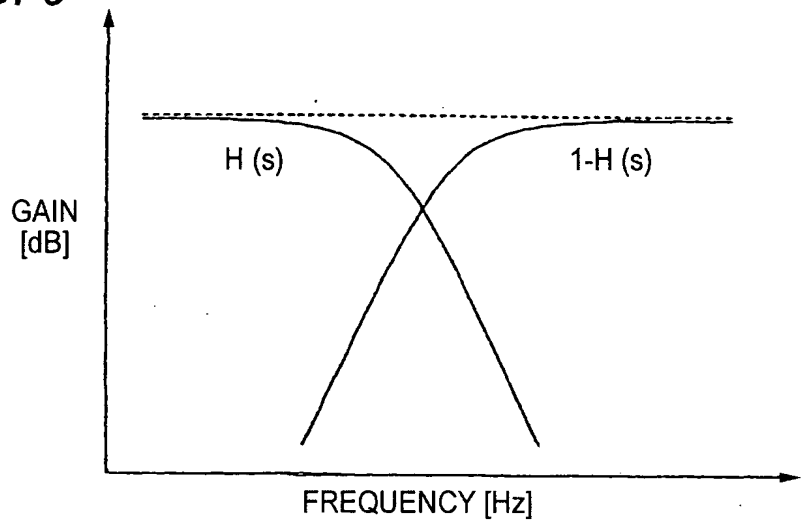
H (s)
1-H (s)
GAIN
[dB]
FREQUENCY [Hz]

FIG. 10

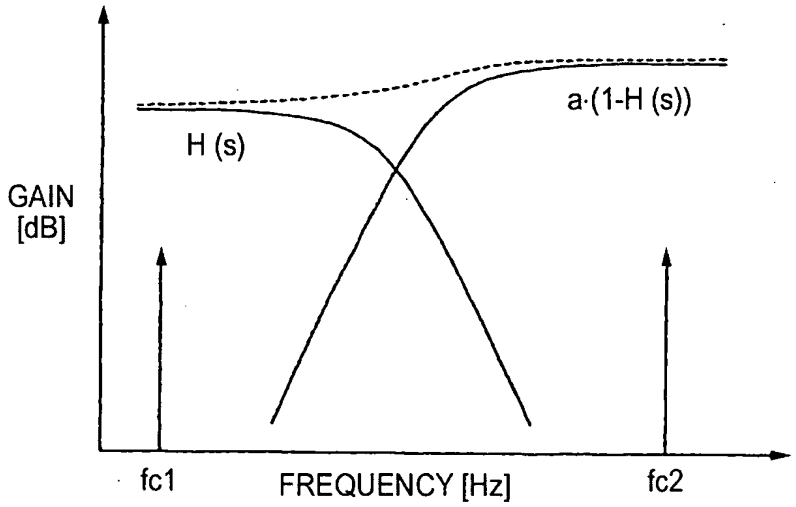
a·(1-H (s))
H (s)
GAIN
[dB]
fc1
FREQUENCY [Hz]
fc2

FIG. 11

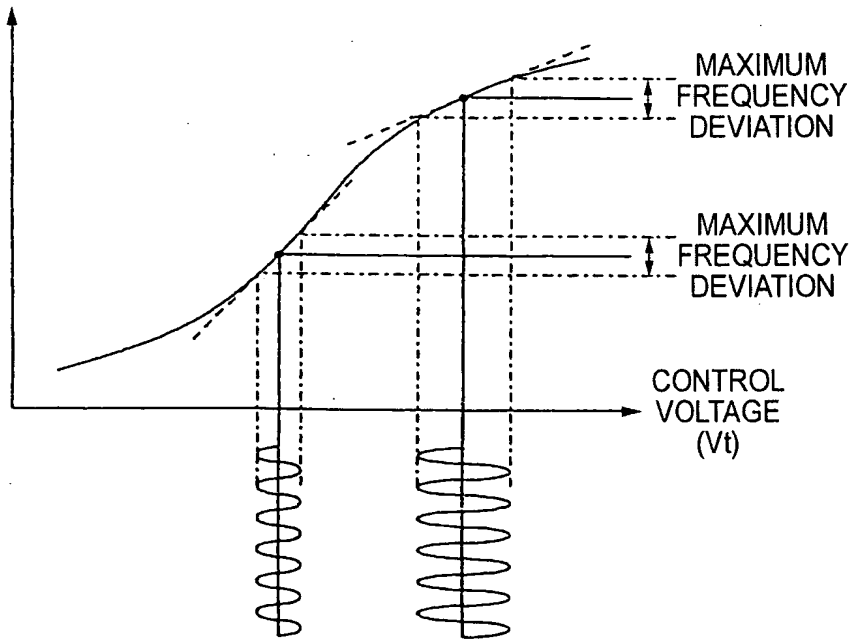
MAXIMUM
FREQUENCY
DEVIATION
MAXIMUM
FREQUENCY
DEVIATION
CONTROL
VOLTAGE
(Vt)

FIG. 12

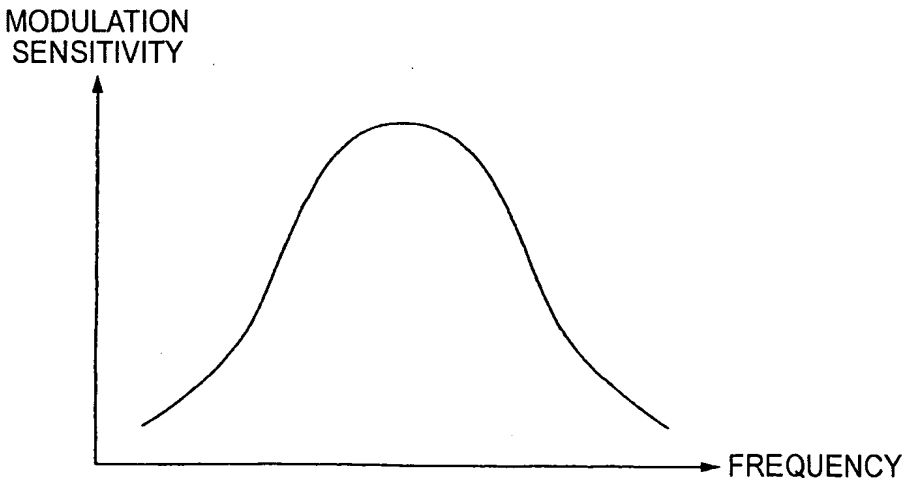
MODULATION
SENSITIVITY
FREQUENCY

FIG. 13